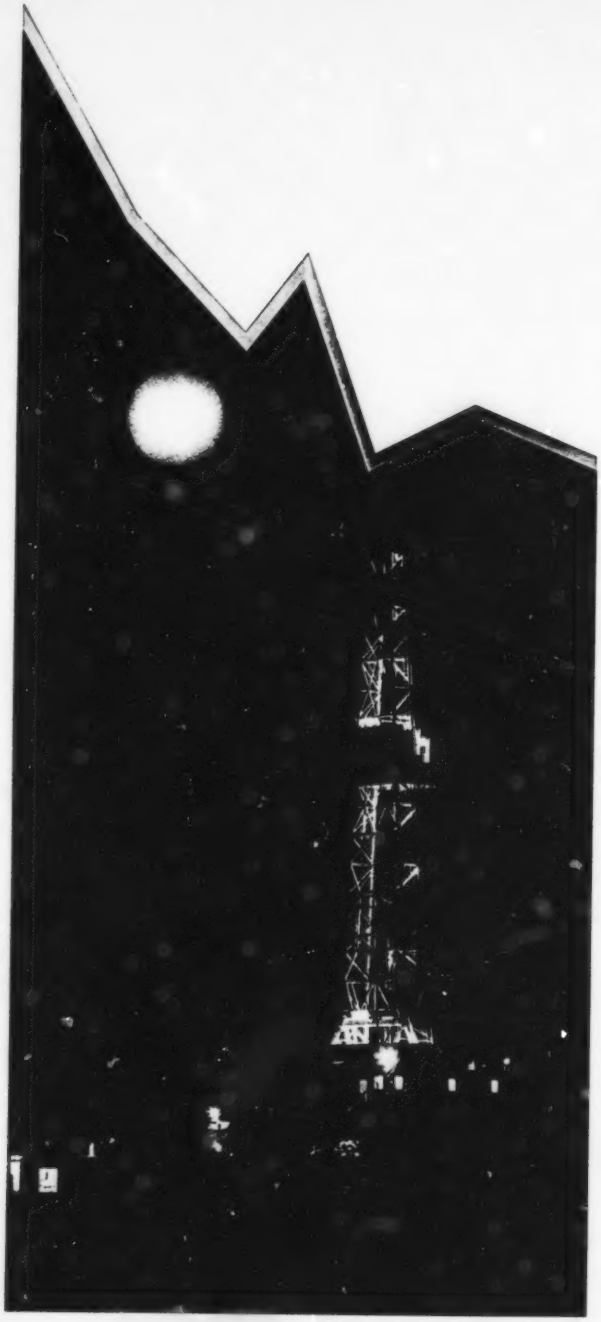

CANADIAN PETROLEUM ASSOCIATION

ANNUAL REPORT 1991

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Canadian Petroleum Association

Head Office
3800, 150 – 6th Avenue S.W.
Calgary, Alberta
T2P 3Y7
(403) 269-6721
(403) 261-4622 – Fax

Ottawa Office
1312, 50 O'Connor Street
Ottawa, Ontario
K1P 6L2
(613) 237-5515
(613) 563-9734 – Fax

Atlantic Canada Office
802, 1809 Barrington Street
Halifax, Nova Scotia
B3J 3K8
(902) 421-1159
(902) 425-4790 – Fax

I.R. (Ian) Smyth
President

P.D. (Doug) Bruchet
Vice President

D.B. (Dan) Macnamara
Vice President

The Canadian Petroleum Association represents medium to large oil and gas exploration, production and pipeline companies operating in Canada. These companies' combined staff include most of the people who work in upstream oil and gas.

CPA member companies account for 60 per cent of all upstream petroleum spending in Canada. They produce about 75 per cent of Canada's liquid hydrocarbons and 65 per cent of the nation's natural gas. That production goes to market through pipelines belonging to CPA members.

The CPA conducts policy analysis for its members, and helps solve industry problems. The association informs the Canadian public about critical energy issues. On the industry's behalf, it prepares technical and analytical submissions for governments and government agencies. It also gathers and distributes operating, economic and policy information for members. In cooperation with government, regulatory agencies and other industry associations, the CPA commissions research and helps set guidelines for the petroleum industry.

The CPA's environmental initiatives have made it a recognized leader in that field.

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Chairman's Report

By tradition, on this page the CPA Chairman offers a commentary on the economic state of the petroleum industry and on key industry concerns. Like the year itself, this report is a challenge.

The CPA's key concern, the fiscal regime, reflects the different interests of the various stakeholders in oil and gas. For the private sector, the petroleum industry is a source of production, entrepreneurial opportunity and employment. For the public sector, it is a primary source of government revenue. During recent years the debate between these groups of stakeholders intensified while the financial performance of the industry deteriorated and governments clung to traditional sources of revenue. Yet the haemorrhaging within the industry has been terribly severe: last year the upstream's net losses were certainly in the hundreds of millions of dollars – our second loss ever – yet it paid some $3 billion in royalties to governments.

The industry's unacceptable financial performance has led inevitably to down-sizing. The number of layoffs from producing companies has topped 10 000 over the last two years. This down-sizing reflects an industry that is focusing upon reorganizing or rationalizing its assets and reducing activity. Despite the best efforts of industry, operating costs increased 9 percent as a result of physical realities associated with declining production.

Future costs of operation will increase due to the rising costs of meeting our environmental responsibilities. For example, as more and more reservoirs reach depletion the industry will accelerate the decommissioning of facilities and abandonment of wells. Beginning with the 1991 fiscal year, our financial reports will include provisions for abandonment and site restoration. The result will be financial statements that more completely reflect the full cycle of our costs of production.

Because of the financial stress on our industry, the lack of government response to our recommendations to improve the circumstances of our industry has been disappointing. That is why our association and the Independent Petroleum Association of Canada commissioned a financial report on the industry's health from an independent consulting firm. By showing clearly the industry's poor financial performance based upon the public record and by setting forth the diminished expectations with respect to future results, the PowerWest Report helped escalate the level of communication between the industry and its stakeholders. It has also served to make industry's serious difficulties a topic of public discussion.

The PowerWest report deliberately avoided addressing policy issues. These concerns are more appropriately a matter for discussion between the industry and government. To prepare for those efforts, the association began a comprehensive review of Canadian oil and gas policy. By year end, we had developed the principles upon which we believe we can reasonably create policy recommendations.

We did make some progress in royalty relief, however. The CPA participated with Alberta and other industry associations in a review of the administration of gas royalties. Although this effort was not immediately successful, we did help convince the government that reform is necessary. We also will continue to work with other government regulators to streamline operating and environmental regulations.

Elsewhere this report comments on the association's many other achievements during 1991. But of particular note was the continuing importance of our activities related to natural gas and environmental matters. We played the lead role in the petroleum industry's response to efforts in California to abrogate gas supply contracts. We represented the industry at hearings within Canada and, in the United States, at hearings dealing with important natural gas transmission issues. On matters of health, safety and the environment, CPA committees and staff were also active on many fronts.

The association's work load continues to be very heavy just as the industry is reducing personnel. Like the industry itself, the association has fewer people available to respond to an increasing number of challenges. This has placed more pressure than ever before on those individuals who work on our behalf. I commend them for their outstanding efforts in maintaining excellent standards of performance.

Through the continued efforts of our association, I am confident we can take steps toward a better financial state for our industry. It will take cooperative efforts between government and industry to make those changes that are necessary to allow our industry again to offer security and improved prospects for the people with the skills and knowledge required to maintain Canada's energy supply. In my view we must have fundamental royalty reform if the industry's health is to improve.

L. B. (Lorne) Gordon
President and CEO
Pembina Corporation
Chairman
Canadian Petroleum Association

Our association and its members must continue to work hard in our communication efforts with all stakeholders in our industry. Policy makers must be aware that our industry can continue to play a major role in provincial economies provided the burden on the industry does not stifle economic activity. It is not appropriate for governments to adopt a harvesting attitude towards the industry when we have the potential to contribute substantially to the provincial economies through economic activity. More than anything else, we need to persuade governments that their interest in the industry lies not in collecting economic rent, but in benefitting from our ability to create new jobs and opportunities. ■

President's Report

In the global scene, 1991 was a year of high drama. From the Gulf War to the dissolution of the Soviet Union, one spellbinding event followed another. The lack of newsworthy activity in the oil industry thus made it look like business as usual. But nothing could be further from the truth. The year may not have been newsworthy, but it was noteworthy indeed.

It was the year in which economic trends that have been developing for many years reached crisis proportions. The litany of problems sometimes seemed almost endless: low commodity prices, increasing operating costs, high interest and exchange rates, high royalties, high taxes, high debt repayments. Taken together, these factors shifted the restructuring of the industry to a forced pace.

The steps the industry is taking to change the way it does business represent responses to hard economic realities. Financial and human resources are far less available than they were in years past, and most people have concluded that no relief from these conditions is likely for at least two or three years. As a result, the industry has shelved many projects and the hopes they represented.

I. R. (Ian) Smyth

President
Canadian Petroleum
Association

Paradoxically, the changing environment is putting opposite pressures on the work of the CPA. Because the industry is shrinking, we are now doing more for our members. Like them, we are also doing it with less. Fewer people are available from our member companies to share the work of CPA's committees. And, like the industry itself, CPA staff and budgets are shrinking.

In 1991 CPA staff was reduced by twenty percent and three regional offices – Regina, Vancouver and St. John's – were closed in preparation for lower budgets in 1992. During 1991 work also began on a review of CPA's priority setting, workload management and committee system, all so we could determine how to do less but accomplish more.

There is no shortage of important work to do, as this annual report will attest. This is particularly true in the environmental area, where legislation and regulation are expanding rapidly. No other organization can really address issues in this field on behalf of our members as a whole. This is equally true in the natural gas business, where deregulation in Canada and the United States continues to generate countless challenges to markets and to profitability.

But no area is more important to us than the work which needs to be done in conjunction with governments in the search for a better fiscal regime for the industry. We must convince Canadians and their governments that there is more to be gained from a healthy petroleum industry and a different revenue mix than from a high level of direct payments to treasuries and a sick industry. That was, and remains, our key task.

In the presence of the new pressures which seem to arise daily in virtually all sectors of our business, it is sometimes easy to be pessimistic about the future. But the strengths which built the industry – hard work, technical excellence, creativity – are still alive and well and we see them daily, too. They continue to form the basis for the vision of an industry which, although different from that of a generation ago, is still crucially important to Canada's economic health.

Your CPA staff shares that vision and, on their behalf, I thank all those companies and individuals who, by their example, continue to demonstrate their belief in our collective strength. ■

Chairman Elect's Report

Last year I chaired the association's Planning Committee, which in recent years has played a key role in proposing policy and program development to the Board. During 1991 the Planning Committee set in motion a process that is reshaping the Canadian Petroleum Association. This reshaping reflects the unhealthy economic climate for Canada's petroleum industry and is a response to that climate.

During 1991 the Planning Committee proposed that the CPA should review its cost-effectiveness. With the help of association staff, it set about exploring ways to achieve this. Unlike its member companies, the CPA grew during the troubled 1980s in response to increasing regulation and other policy issues. In the 1990s, however, the industry simply cannot afford to deal with all the issues we would like to. Because the economic environment for the industry is so difficult, the Planning Committee proposed that the association concentrate on high value-added services. Like the industry itself, we proposed cutting away services that did not meet essential core needs.

The first action to follow from our recommendations was to rationalize association offices and staff, closing three of the association's six offices. Those closed were in St. John's, Regina and Vancouver. The association retained its Calgary, Halifax and Ottawa offices, but reduced staff through attrition and failing to renew service contracts. The Halifax office took over work formerly done in Newfoundland, and Calgary staff now perform the administrative work of the association's Saskatchewan and British Columbia divisions.

We also began the process of analysing and ranking the tasks performed by CPA committees. Today, member companies have fewer staff hours to volunteer for association work, so we must make better and more efficient use of committee members and staff facilitators. Staff and committee members are proposing ways to restructure the committee system and are analysing work management by the committees. In addition, governors are helping set priorities and ranking proposed committee projects by their urgency and usefulness.

A third area, which has always been a core responsibility for the Planning Committee, is budget planning. This year's budget, which incorporates the savings mentioned above as well as others, is 14 per cent lower than that of 1991. However, it still provides us with the means to meet our key objectives.

At the end of 1991, the board approved a document titled **Towards an Oil & Gas Strategy for the '90s – Principles.** The document sketches the history, status and future prospects of the oil and gas industry in the Canadian economy, and enunciates principles stemming from them. As 1992 progresses, these principles will guide development of all policies and strategies by CPA committees and task forces.

I believe the emphasis on reorganization and analysis in 1991 has sharply focused CPA goals and plans for 1992. One major objective for the year is to work with government to help simplify royalty and reporting structures. Another is to persuade a variety of publics that future benefits from resource development to society will shift from economic rent to economic spin-offs from industry activity. I look forward to participating in the achievement of those goals. ■

T. Don Stacy

Chairman and President
Amoco Canada Petroleum
Company Ltd.;
Chairman, Planning

The Changing Industry

The economic crisis of the petroleum industry is more than another bust between booms. It marks the beginning of a new era, a phase characterized by a fundamental rethinking of the industry's prospects. This era has already seen sweeping changes to corporate structures, to corporate goals and cultures, and to investment behaviour in the upstream sector. A stronger industry with a different face will emerge as it progresses, an industry able to cope with the challenges and opportunities that still lie ahead.

The industry no longer believes higher prices for oil and gas will solve its financial quandary. Companies have removed overstated asset values from their balance sheets. They are pursuing cost reductions on all fronts through innovative management structures and new business practices. They are reducing debt to bring debt/equity ratios to acceptable levels; the sharp decline in interest rates is a welcome development.

These actions have a single goal: to make the industry financially viable. Doing so will regain the investor appeal that waned as the industry's rates of return on equity and capital employed went through a decade of steady decline. To secure its future, the industry is putting its financial affairs in order. Although this has forced tough decisions, industry actions demonstrate its determination to bring earnings in line with the risky nature of the business.

Accordingly, the industry has oriented its investment spending towards early cash flow. In practice, it means lower levels of exploration and capital expenditures, at least for the intermediate term. Longer term investments will depend on the availability of discretionary cash.

The activity levels in 1992 are probably the chord around which the upstream sector will oscillate for the next few years. Although harsh, this reality has a bright side. The industry will emerge with renewed economic health and vigour, providing greater stability for the economies of western Canada.

Creating this kind of stability will require reform of the provincial royalty regimes. Through the royalty system and cash disposition of oil and gas rights, the provincial governments are a major partner in oil and gas development. In addition to these direct revenues, economic spinoffs from the industry's activities and investments are major contributors to the gross provincial product. The industry also provides rewarding employment opportunities.

Like the industry, governments can no longer cling to the hope that higher prices will solve the financial difficulties of both corporate and provincial treasuries. Industry has done what it can to adjust to dramatically reduced revenues and rising costs. Now government must act, with Alberta – because of its dominant position – assuming the lead. Because oil and gas are the mainstay of the Alberta economy, a healthy and vibrant industry is critical to the province's prosperity.

Industry provided huge revenues to provincial treasuries when prices were much higher and costs considerably lower – at one time as much as 65 per cent of Alberta's revenue. An aberration that will not come again, that period left as one legacy a distortion of the royalty system. Legislated in 1974, that system recognized that prices could change and that costs would rise. The "select price" went into the formula to make the adjustments regularly. Unfortunately, only once was that adjustment made. The system has thus strayed from the economic realities faced by an industry active in a maturing geological and operating environment. A revision is overdue.

In addition, governments must look for ways to reduce the administrative costs imposed by complex and sometimes puzzling reporting requirements, and by the ever-widening regulatory processes. Regulatory policies need to be clear and consistently applied. Applying them in any other way creates confusion, delays and higher costs.

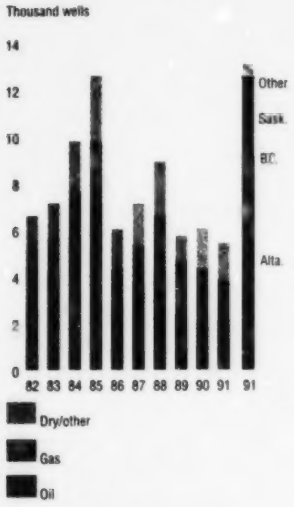
A true partnership between industry and government will position this vital sector for the economic opportunities still ahead. While the Western Canadian Basin is a mature oil exploration region, natural gas prospects are considerable. Major discoveries still beckon.

Natural gas has been one of Canada's and Alberta's most important export commodities for decades. Major new pipelines will provide the opportunity to increase these volumes in the years ahead and reduce the bothersome surplus overhang. Despite the depressed prices and the regulatory difficulties currently surrounding exports, the future of natural gas augurs well for both the economy and the industry itself.

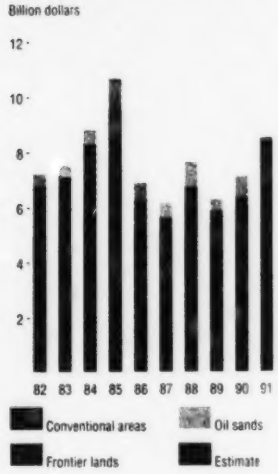
On the oil side, western Canada has by far the world's largest supplies of heavy oil and bitumen. These are high-cost resources that also pose unresolved technological and environmental challenges. These challenges notwithstanding, the size of these resources and the economic opportunities they represent call for innovative strategies for their development. Only through full co-operation can the stakeholders in these resources overcome the obstacles to their development. ■

Statistical Summary

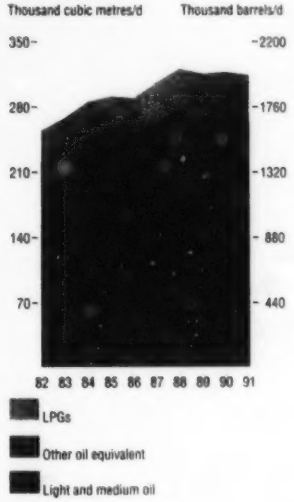
Canadian Well Completions



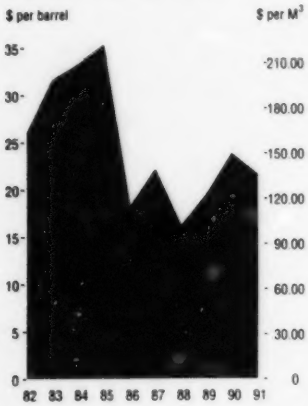
Exploration and Development Expenditures



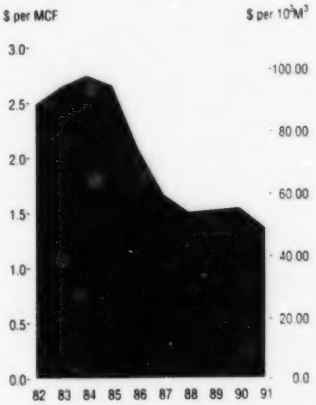
Liquid Hydrocarbon Production



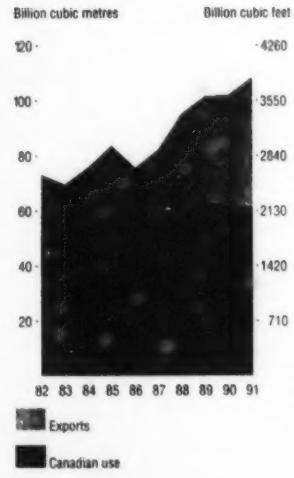
Canadian Crude Oil Prices



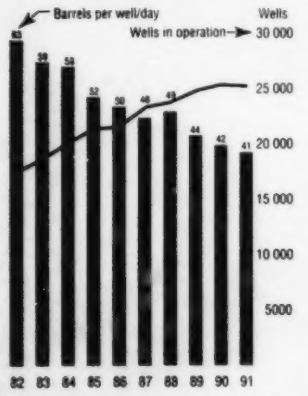
Canadian Natural Gas Prices



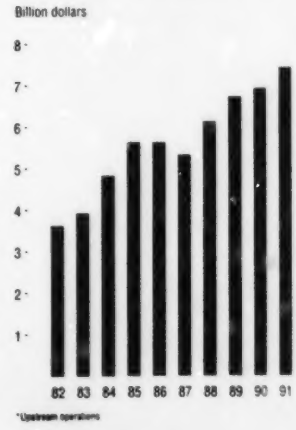
Natural Gas Production



Alberta Oilwell Production

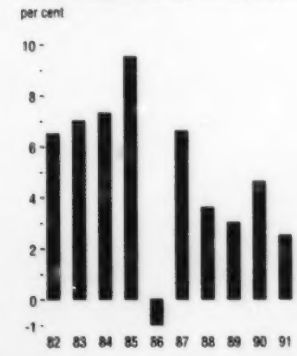


Canada - Operating Costs*



*Upstream operations

Rate of Return on Capital Employed



The Year in Review

or the petroleum industry, 1991 had a promising start. But because of the drop in oil prices that followed the Gulf War, activity turned down in the second quarter and did not recover. The restructuring of the Canadian upstream sector intensified as the year went by, and major exploration budgets suffered severe cuts. As a result, drilling completions – strong in the first quarter – were lower than in 1990, itself a poor year.

Upstream sector net income for the year is likely to be negative, although crude oil hedging activities helped keep it in the black in the first half. The Hibernia, Caroline and Biprovincial Upgrader mega-projects caused capital spending to increase by some 20 per cent over 1990 levels. This protected the regional economies of Alberta and the Atlantic provinces (particularly Newfoundland) from the worst of the recession that otherwise ravaged the Canadian economy.

Outlook – Nineteen ninety-two will be another tough year. Further streamlining to enhance operating efficiencies and control costs are receiving top priority. About $4 billion of producing properties remain on the market as producers continue to focus on core properties.

The push to improve financial performance will severely test the industry's new management structures. This will be all the more trying because of the loss of experience in the industry brought on by thousands of layoffs in the operating companies (some offset by growth in medium and junior companies.) The drilling and service sector suffered even greater losses as many companies went out of business. Since the oil price collapse in 1986, an estimated 35 000 have lost their jobs in these two sectors.

Several factors – including severance packages and the two mega-projects in Alberta – delayed these layoffs from being reflected in unemployment statistics. However, in January 1992 the numbers were becoming clear. Seasonally adjusted unemployment in the province had risen to 9.4 per cent from 6.5 per cent in January 1990. In Calgary, unemployment had increased by more than a third in slightly more than a year.

New long-term debt exceeded redemptions in 1991, largely because of debt-financing for mega-projects. But large write-downs in 1990 and 1991 have put balance sheets in much better shape for improved financial performance in the future. In addition, most companies are in better financial shape as a result of debt repayment or restructuring. And finally, recent reductions in interest rates will help to enhance discretionary cashflow.

Taken together, these factors suggest that 1992 will represent the bottom of the down cycle.

Natural Gas – Only a few years ago, the Canadian industry saw natural gas as one of the few areas poised for growth. During 1991, political and economic factors reshaped perceptions of the natural gas industry.

Mild winters combined with such other economic factors as new sources of supply and increased use of storage facilities helped keep gas prices depressed. The economic recession curtailed demand growth. Although Canadian gas producers increased sales volumes to US markets, lower prices and the stronger dollar kept revenue down. During 1991, domestic sales tottered due to the recession.

A bitter conflict began when the California Public Utilities Commission sought lower prices under the guise of increased

Retrospective

January

- The federal government asks the National Energy Board to study the possible closure or reversal of the Sarnia/Montreal pipeline. An extension of the IPL system, the line delivers its last shipment of western Canadian oil as Montreal refiners opt (for economic reasons) to run foreign crudes.

February

- Alberta announces an agreement by which Syncrude may process off lease bitumen for other producers. The agreement – which will allow Syncrude to use its surplus upgrading capacity to process up to 5 million barrels of purchased bitumen annually – will be in effect for three years.
- The federal government announces in its budget that the National Energy Board will move its offices to Calgary. The move takes place in September.

March

- Energy Mines and Resources reassigns the staff of the Canada Oil and Gas Lands Administration (COGLA) to other federal departments and agencies. This action reflects federal efforts to negotiate new oil and gas management regimes in Canada's frontier regions (including the existing Accords in the Atlantic provinces).
- Saskatchewan announces changes to its royalty/tax regime (effective after March 31) with particular significance for horizontal wells. The first 12 000 cubic metres of oil production from "non-deep" horizontal oil wells will pay lower royalties or receive tax exemption. Deep horizontal oil wells will receive the same fiscal treatment (including holidays) as deep vertical oil wells.

competition for the California marketplace. For Canadian producers, the point of contention is that the CPUC decision abrogates long-term contracts with Canadian suppliers. The CPUC's intention was to start a sales scramble. Introducing capacity brokering (made possible by breaching Canadian contracts) would get Canadian producers to sell short-term spot gas at fire sale prices.

At the CPA's request, the National Energy Board initiated a hearing to consider CPUC's actions in relation to the export licenses granted to Alberta and Southern in 1989. These licenses run until 2005, and received strong endorsements from California parties (including the CPUC) at a 1988 NEB hearing into renewing export licenses to California.

Canadian pressure began to show positive results with the January 1992 announcement that Canadian governments and the CPUC had agreed on principles on which to base a settlement. Nonetheless, in early 1992 the NEB announced that it will review exports to California to ensure they do not circumvent sales made under long-term licenses to California.

Despite the dispute, there is a race to deliver more natural gas from Alberta to California. Two competing pipelines – Altamont Gas Transmission Co. and Pacific Gas Transmission Company – have put up letters of credit to cover the cost of new pipeline facilities to Nova's gas transmission system. To inform all parties on each project's merit, Alberta's Energy Resources Conservation Board scheduled a hearing to review submissions by project sponsors and interested shippers. The Board will not select a winner, but will issue a report on both projects by late spring of 1992.

Primarily due to the completed construction of additional pipeline capacity for export markets, gas exports increased during the year. The National Energy Board gave approval to TCPL for a $1.8 billion facilities expansion. This expansion will allow TCPL to transport an additional 19.2 million cubic metres (677 million cubic feet) of natural gas per day, primarily to export markets. The Board also approved 15 applications for export licenses, with total licensed exports of 45.2 billion cubic metres (1.6 trillion cubic feet).

In another development, construction of the Iroquois Pipeline continued during the year, and the pipeline began operations early in 1992. From a border point in Iroquois, Ontario, the line will be in full service by November 1992. The 600-kilometre pipeline will be able to deliver 15 million cubic metres (534 million cubic feet) per day of natural gas to markets in New England, New York and New Jersey, reducing reliance on offshore oil.

Drilling – Despite a strong start in the first quarter, there was no upturn in drilling for the year. The final tally will likely show 5 400 well completions in Canada in 1991, compared with 6 020 well in the previous year. The slump in gas prices caused the cancellation of many gas drilling programs. Discretionary drilling again focused on oil.

To encourage additional drilling, in November the Alberta government announced a four-part oil activity initiative. Recognizing the industry's importance to the provincial economy, the government's Crude Oil Exploration and Development program offers royalty holidays to stimulate drilling.

First, an exploration oil well holiday of a maximum two years applies to exploratory wells drilled from November 1991 to the end of March 1992. For the next 12-month drilling period, the holiday is one year in duration. The program has a $1 million per well cap. Second, development oil wells drilled between November 1991 to the end of March 1993 receive a holiday of one year, with a $400 000 cap. Third, wells reactivated following at least one year of suspension receive a 5-year royalty holiday. A 25 000 barrel per well production cap applies. The fourth part of the program was the removal of red tape associated with new oil well certification.

This temporary program will probably encourage some additional drilling, but the size of any increase is speculative. December well licenses were 30 per cent below last year's level. This represents a slow start

April

- Alberta announces temporary changes to the royalty calculation for horizontal wells drilled during 1991 and 1992. Under the program, productivity rates for horizontal wells are divided by the number of vertical wells that would be drilled to produce a similar area, to a maximum of three. This slightly lowers the royalty payable by reducing productivity rates.

May

- The federal government accepts the final report of the Beaufort Sea Steering Committee, a government/industry group formed to assess the recommendations of the Environmental Impact Review Board on drilling in the Beaufort Sea. The steering committee makes environment-related recommendations covering contingency planning, safe operations and other environment-related issues for Beaufort Sea drilling.
- Alberta increases rental rates for mineral surface leases and pipeline installation leases by 50 per cent, and introduces $1000 per year rental charges on well sites in provincial grazing reserves. The province also introduces a fee of $625 per kilometre on seismic operations.
- The National Energy Board approves a $1.8 billion facilities expansion which will allow TCPL to transport an additional 19.2 million cubic metres (677 million cubic feet) of natural gas per day, primarily to export points in eastern Canada. The Board also approves 15 applications for natural gas export licenses. Total exports licensed amount to 45.2 billion cubic metres (1.6 trillion cubic feet).

The Year in Review

to 1992 drilling activity, despite the best access conditions the industry has seen in many years.

The CPA forecast of 1992 drilling is 4 800 wells, the lowest level since 1975. This level of drilling will probably lead to further attrition among drilling contractors.

Drilling in Canada's offshore included a dry hole on the Grand Banks offshore Newfoundland. BP and partners abandoned the $30 million Thorvald P-24 – located northwest of the Hibernia oilfield – without testing. Offshore Nova Scotia, there was some development drilling for the Panuke/Cohasset condensate field. In addition, the Balmoral M-32 discovery well (3 kilometres northeast of Panuke/Cohasset) located a small field that will go on production from the Cohasset location.

With two platforms successfully installed, Canada's first commercial offshore production will begin by mid-year 1992. Managed by LASMO Nova Scotia, the Panuke/Cohasset project is a small development and does not compare in size with the $5.2 billion Hibernia project. Because of its small size, LASMO and its partner, Nova Scotia Resources, had to assure low front end capital costs ($200 million). One of their solutions was to lease the jackup, the storage tanker and the shuttle tanker. To keep operating costs down, production will shut down in stormy winter months.

Initial production will be from Panuke. Cohasset will come on stream after all the Panuke wells are on. Seasonal production will average between 30 000 and 40 000 barrels per day of condensate.

Mega Projects – The construction site at Bull Arm is ready for the start of the first major phase of the Hibernia oilfield development. According to the Hibernia consortium's original plans, some 2 000 to 3 000 workers would be on site for fabrication of the concrete base of the production platform, beginning in April 1992. Construction of the Gravity Based System would give the Newfoundland economy a major boost.

However, uncertainty began to surround the project in early 1992 when Gulf announced that it would withdraw from the project, writing down its investment. The federal government rejected the suggestion that it make more money available for the project, and no new private sector partners were readily available. Accordingly, the remaining partners postponed construction of the Gravity Based System as they looked for a new equity partner.

In western Canada, two mega projects will end the construction phase by about mid-year and enter commissioning. Both projects are on schedule. Between them, they softened the impact of the recession on Alberta.

Located at Lloydminster at the Alberta/Saskatchewan border, the Biprovincial Upgrader will process 6400 cubic metres (40 000 barrels) per day of bitumen and conventional heavy oil into synthetic oil. Over budget, the project is a joint venture between Husky Oil and the Alberta, Saskatchewan and federal governments.

Shell's billion-dollar Caroline gas field development is on schedule and on budget. Construction will peak in the spring of 1992, and then taper off as the complex gas processing facilities move into the commissioning phase. Production will begin by year end 1992.

Finance – Takeovers, mergers and asset acquisitions continued during 1991, with some $3.4 billion in transactions taking place. A total of $1.2 billion (up 75 per cent from 1990) represented acquisitions of less than $5 million each. These transactions reflect efforts to increase industry efficiency through rationalizing assets.

Retrospective

- The Canadian Petroleum Association asks the NEB to review two Alberta & Southern natural gas export licenses, in response to unilateral action by the California Public Utilities Commission to reopen long-term gas contracts with Alberta natural gas producers.

September

- The Canadian Petroleum Association and the Independent Petroleum Association of Canada unveil an independent fiscal study of the petroleum industry which details the industry's financial difficulties. The PowerWest report finds that the industry's returns on capital employed have been well below the cost of capital since 1981 and are also well below returns in other major sectors of the Canadian economy.

October

- Manitoba announces petroleum development incentives to explore deep formations in that province. The first 50 000 cubic metres (315 000 barrels) produced from discovery wells will be exempt from Crown royalties. The province also announces royalty holidays on other new producing wells and extends its horizontal drilling incentive until the end of 1992.

November

- Alberta's Energy Resources Conservation Board issues a Call for Information on the separate pipeline proposals (Altamont and PGT) to transport additional volumes of Canadian gas to California. The purpose of the initiative is to provide a forum to publicly review information relevant to the two proposals. This will assist producers in deciding which project to dedicate exports to.

The single largest acquisition involved the sale of Nova Corporation's 43 per cent stake in Husky to a group led by Hong Kong businessman Li Ka-shing. Li, who already owned 43 per cent of the company, gained government approval of the takeover because of changed circumstances in the industry.

Current federal rules forbid foreign takeovers of large energy companies unless they are in financial difficulty. However, the federal government has announced that it will relax rules on foreign investment in the oil industry. Early in 1992, the government said it would introduce legislation that will treat the oil and gas sector the same as other industries. The cash-strapped industry welcomed this decision.

In July, Petro-Canada completed a financing designed to lead eventually to full privatization. The public offering of 19.5 per cent of Petro-Canada shares raised $520 million, all of which went toward paying down debt.

Capital Expenditures – The upstream sector's capital spending rose sharply in 1991, despite severe budget reductions for conventional oil and gas activities. The 20 per cent increase to approximately $8.4 billion is solely attributable to the mega projects. Completion of the mega projects in western Canada, delays or suspension of work at Hibernia plus further cuts in conventional activity will reduce total 1992 capital and exploration spending considerably.

Reflecting the continued uncertainty over future oil and gas prices, industry spent less and acquired fewer acres at government land sales. Bonus payments were $384 million, down 36 per cent from the previous year.

Production – The industry had to overcome several obstacles to maintain previous production levels of crude oil and equivalent (conventional crude oil, synthetic crude and bitumen from the oil sands and condensate/pentanes plus). Government-ordered hydrostatic testing of several sections of the Interprovincial Pipe Line system in the US at times curtailed crude oil shipments. In August the system was under 36 per cent prorationing. IPL also mothballed the Sarnia-Montreal link because of lack of shipments. The Quebec refineries were a small but valued market, especially for heavy oil producers.

Light and medium crude production in Alberta continued its decline. However, the Suncor and Syncrude oil sands plants achieved record production of synthetic oil. In situ bitumen production dropped as operators changed steaming cycles to reduce output during periods of extremely low prices. Heavy oil price differentials widened in 1991 to record spreads, dropping bitumen prices at times to levels below lifting costs.

Condensate/pentanes plus production was up in line with higher gas production. This kept total liquids production about the same as 1990 at 1.7 million barrels per day.

The environment – Environmental issues again were a matter of serious concern to the petroleum industry. Of particular note was a judgment from the Alberta Court of Appeals – the so-called Northern Badger case. The court ruled that in a bankruptcy case, the ERCB had the right to demand that the receiver formally abandon certain wells before paying out creditors. This case has widespread implications for cases dealing with public safety and the environment. Early in 1992, the Supreme Court refused to hear an appeal.

The Canadian Institute of Chartered Accountants now requires financial statements to include provisions for future well abandonment and site restoration. Companies may use discretion to determine the amount of these liabilities, which will appear in the balance sheet as charges against income. With the maturation of the industry, the industry will need to undertake more and more site restoration. This and the rising costs of site restoration will make these accounting changes an increasingly significant item on corporate balance sheets.

Thus, higher environmental and operating costs combined with soft prices, uncertain gas markets and a less than favourable fiscal regime made 1991 one of the most difficult years in the industry's history. There is little doubt that 1992 will see more of the same. ■

- Alberta announces the Crude Oil Exploration and Development Program, an incentive program designed to increase oilwell drilling activity. The program includes royalty holidays for exploration, development and reactivated oil wells, and eliminates the need to apply for new oil well certification.

December

- The federal government announces that it is working with the natural gas industry and with Alberta and British Columbia to respond to California Public Utilities Commission decisions which break long-term upply contracts to California. Simultaneously, Alberta announces that it will introduce a regulation ensuring that the firm transportation rights of Alberta and Southern's supply pool are not undermined by regulatory decisions in California.
- Shell Canada acquires exploration rights for three parcels of Crown land in the Mackenzie Delta. Most of the 111 000 hectares is located near and around the 1990 Shell Unipkat N-12 oil and gas discovery, some 115 kilometres northwest of Inuvik.
- Federal regulations governing royalties on Canada Lands go into effect, replacing interim regulations. The new regime applies to hydrocarbon developments in areas of federal jurisdiction not subject to joint management agreements.

CPA Structure

Organized under divisions and general committees. CPA standing committees are responsible to the membership through the Board of Governors, which has executive, finance and planning committees. Each division has its own board of directors.

CPA Membership

Board of Governors

Executive Committee
Finance Committee
Planning Committee

Legend:

Membership and Board of Governors
Executive Committees
Divisions
General Committees
Standing Committees

General Committee on Economics and Statistics

- Accounting Committee
- Customs and Sales Tax Committee
- Economics Committee
- Electronic Data Interchange Committee
- Income Tax Committee
- Realty and Mineral Tax Committee
- Reserves Committee
- Statistics Committee

General Committee on Natural Gas Policy

- Natural Gas Policy Committee
- Foothills /ANG Committee
- Gas Deregulation Committee
- NOVA Committee
- TCPL Committee
- U.S. Transportation Committee
- Westcoast Committee
- Gas EDI Committee

British Columbia Division

Frontier Division

- Arctic Management Committee
- East Coast Operators Management Committee
- Fisheries Advisory Committee
- Production Committee
- Safety Committee
- Oil Spill Committee

[redacted] Committee [redacted]dustry Operations

- Communications Systems Committee
- Drilling Committee
- Geophysical Committee
- Insurance Committee
- Legal Advisory Committee
- Mineral Rights Committee
- NEB Cost Recovery Committee
- Operations and Engineering Committee
- Surface Rights and Land Use Committee
- Survey and Mapping Committee

[redacted] Committee [redacted]blic Affairs

[redacted] Committee [redacted]ety, Health and Environment

- Alberta Petroleum Industry/ Government Environmental Committee
- Environmental Standing Committee
- Human Resources Committee
- Occupational and Environmental Health Committee
- PROSCARAC Inc.
- Safety Committee

Pipeline Division

- Alberta Subcommittee
- Lands and Rights-of-Way Committee
- Pipeline Environmental Committee
- Rate Regulation and Accounting Committee
- Technical Committee

[redacted] Committee [redacted] Policy

- Crude Oil Committee
- Enhanced Recovery Committee
- Oil Sands and Heavy Oil Committee

Saskatchewan Division

- Safety and Public Affairs Committee

Economics and Statistics

General Committee on Economics and Statistics

- Accounting Committee
- Customs and Sales Tax Committee
- Economics Committee
- Electronic Data Interchange Committee
- Income Tax Committee
- Realty and Mineral Tax Committee
- Reserves Committee
- Statistics Committee

As the industry's financial difficulties have become increasingly apparent, economic issues have taken on greater importance. Taxation and royalties were matters of concern because they are high and because they are administratively complex. These concerns were the focus of several committee initiatives, and led to a major study on petroleum economics in Canada.

The association began a comprehensive review of the principles and policies under which the association carries out its business. This process involved all the committees of the association. An integration team developed a set of principles that received Board of Governors endorsement toward the end of the year. As a response to the new realities in the industry, these principles are a step toward developing strategies and policies for the 90s.

Perhaps the single most important issue the association addressed during the year was the question of high royalties. This was a key Economics Committee focus. The committee also reviewed specific royalty issues in Alberta and British Columbia.

The CPA cash flow model helped assess the impacts of oil and gas prices in the upstream sector. The association shared these results with governments and other interested parties.

During the year the committee retained consulting firm PowerWest Financial Ltd. to give an independent assessment of the financial status of the upstream industry. The resulting report received much publicity. Its impact has been far-ranging. The content is useful as background in communicating the need for policy changes.

The Income Tax Committee's 1991 prebudget submission addressed concerns about levels of taxation and outstanding technical issues. Concerns about interest deductibility, divisive reorganizations and reclamation expenses remain at the top of the committee's list of priorities.

The Customs and Sales Tax Committee held talks with Revenue Canada on administrative issues surrounding the Goods and Services Tax. The committee believes these talks were productive, and hopes they will lead to legislative or regulatory changes during 1992.

The Realty and Mineral Tax Committee worked on trying to reduce the increasing level of municipal taxation in all three western provinces.

In July, the Reserves Committee released its annual estimates of Canada's oil and gas and associated by-products reserves for year-end 1990. Briefly, the announcement reported reductions in reserves of crude oil and equivalent, while gas reserves remained steady. As a result of restructuring within the industry, the committee asked new companies to share the task of compiling Canada's reserves.

The Statistics Committee published the 37th edition of the **CPA Statistical Handbook** and the second of **CPA Petrographs**. The Committee continued to meet with Statistics Canada and the Petroleum Monitoring Agency to review annual upstream expenditures.

The Accounting Committee dealt with a diverse list of items during 1991. The Removal and Restoration Task Force, created to address the Canadian Institute of Chartered Accountants pronouncement on future restoration costs, released its guide to industry in March. To help reduce industry's general and administration costs, the committee participated in Alberta Energy's royalty simplification project. The mandate of this task group, which will complete its work by mid-1992, is to address the administrative complexities in Alberta's natural gas crown royalty. The committee also participated in an industry royalty administration task force dealing with similar issues for both oil and gas production in all the producing provinces.

D. G. (Doug) Stoneman

Executive Vice President
Shell Resources
Canada Limited

The EDI Committee continued to support and coordinate electronic data interchange applications in the industry. More than 400 men and women participated in a successful CPA conference – "EDI in the Canadian Oil & Gas Industry" – in the spring. The Standards Subcommittee facilitated changes in the ANSI standard documents to accommodate existing and new Canadian applications.

Two new initiatives – a Crude Oil Movement System and GasEDI – both showed significant progress over the year. The participation of Alberta representatives in industry EDI activities led to a potentially important initiative – investigating opportunities for the industry to use standard electronic formats to submit routine regulatory reports to government. ■

Industry Operations

General Committee on Industry Operations

- Communications Systems Committee
- Drilling Committee
- Geophysical Committee
- Insurance Committee
- Legal Advisory Committee
- Mineral Rights Committee
- NEB Cost Recovery Committee
- Operations and Engineering Committee
- Surface Rights and Land Use Committee
- Survey and Mapping Committee

The committees continued to play lead roles in contributing to the development of wise regulation. What follows is a brief summary of several important issues.

The Drilling Committee provided written comment to the ERCB on such issues as drilling and completion operations, blowout prevention requirements, well suspension guidelines, and H_2S safety services which were incorporated in ERCB Information Letters and directives to industry.

B.D. (Barry) Cochrane

President and CEO
Norcen Energy
Resources Limited

The committee did an extensive review of the proposed changes to the B.C. Drilling and Production Regulations. British Columbia's Energy, Mines and Petroleum Resources ministry accepted most CPA recommendations and have released a new improved document as a useful guideline for industry.

However, the most important committee project was the completion of the Wellsite Sump Analysis Study, an analysis of wastes found in 100 randomly selected sumps in Alberta. One result of this industry initiative was a reduction in the number of chemical analyses an operator had to perform on solid and liquid phases of drilling wastes. The ERCB and Alberta Environment had originally proposed tests for 41 different elements. Work continues on the development of analytical criteria for the land spreading of drilling wastes as a more cost effective approach for dealing with drilling wastes.

Alberta Forestry, Lands and Wildlife issued unrealistically short work permits for industry activity in known Woodland Caribou habitat. The Geophysical Committee, with support from the Land, Pipeline and Environmental Committees, established the Petroleum Industry/Government Caribou Steering Committee. The efforts of this committee led to standards that enable industry operations to continue, while reducing the impact of industry on habitat of critical wildlife.

The Geophysical Committee continues to negotiate with Forest Management Agreement holders for industry access to forests controlled by the forests products industry. Reasonable financial compensation for trees cut for industry activities has been a major issue between the two principle forest land users. The Geophysical Committee, the Pipeline Division and the Surface Rights Committee are negotiating for petroleum industry access to forests controlled by FMA holders. As part of this process, they submitted two position papers to the FMA holders and the government as reasonable solutions to access problems caused by multiple land users of the same land base. As a result of these efforts, the two industries are optimistic that in 1992 they will agree upon a mutually acceptable timber damage table based on age, height and density of trees.

The committee also saw progress in establishing a B.C. Trappers' Compensation Program at semi-annual meetings with B.C. government departments in Fort St. John. These meetings also reviewed the stringent stipulations of regulators for stream crossings during geophysical exploration.

The Surface Rights and Land Use Committee dealt with a wide variety of land use issues. These included road use agreements, reclamation of site responsibilities, model facility crossing agreements, and annual rent reviews on freehold lands with absentee landowners from Saskatchewan to B.C. The committee reviewed and provided a written submission on proposed changes to the Saskatchewan Surface Rights Acquisition and Compensation Act. This legislation is still pending.

The B.C. government requested changes to the "Walk-Around Referral" process, which enables operators to acquire regulatory approvals for industry facilities in a short period. The Surface Rights Committee made suggestions that were accepted by government, maintaining rapid turnaround times for facility approvals. The committee also maintained important liaisons with the Alberta government through representation on the Land Agents Advisory Committee and Trappers Compensation Program.

The Survey and Mapping Committee focused on the implementation of the new Canadian survey datum "North America Datum 1983" (NAD'83). Industry, its vendors, clients and regulatory agencies need a logical transition from the old NAD'27 datum to the new NAD'83. The committee has maintained communications with provincial and federal regulatory bodies and provided technical input based on the rapidly changing technology in the field for the most cost effective methods of completing the transition. B.C. has legislated the use of NAD'83 by June 1992 while the other provinces and federal agencies will likely follow within 2 to 5 years, pending the resolution of several technical and administrative problems.

The committee designed and implemented the use of a Coordinate Seismic Data Exchange Format that has been well accepted by industry as an effective method of exchanging seismic survey data.

Unitel Communications requested CPA support for its application to the CRTC for permission to create a second long distance telephone network in Canada. Unitel proposed a network that would compete with the current Telecom Canada monopoly. The Communication Systems Committee intervened at the CRTC hearing with a generic argument that increased competition in the market would reduce long distance telephone rates while increasing the availability of different services. The CRTC has not yet made a ruling on the Unitel application.

The committee also provided a written submission to the federal Department of Communication **"Towards the Radio Spectrum Policy Framework for the Twenty-first Century."** This submission recommended retaining the existing method of allotting radio frequencies. ■

Oil Policy

General Committee on Oil Policy

- Crude Oil Committee
- Enhanced Recovery Committee
- Oil Sands and Heavy Oil Committee

During 1991 the committee's focus on pipelines regulated by the National Energy Board led to a busy year for Crude Oil Committee and its tolls subcommittee. In addition, the Heavy Oil and Enhanced Oil Recovery committees negotiated with Alberta Energy on key policy issues.

The regulatory issues began indirectly when, in April, IPL's Sarnia to Montreal line (Line 9) received no nominations for oil transportation. As a result, IPL applied to the NEB for approval to de-activate the line. The federal energy minister had already asked the NEB to conduct a study into alternatives for the line. As a result of that request, the NEB sought views from interested parties by written submission. The CPA filed a position and met with the NEB, which approved mothballing the line while considering its future. The Board identified several alternative uses for the line, including continued west to east flow, reversal of the line to transport offshore oil from Montreal to Sarnia and conversion to natural gas.

To restrict unnecessary costs at hearings, the CPA and other interested parties met with TransMountain on many occasions over several months to negotiate resolutions on outstanding issues, reaching clear understandings of each other's point of view in the process. The participants in these meetings reached agreement on several issues, including the heavy oil surcharge and tankage credits. As a result, these items will not require oral testimony at the NEB Class 3 hearing. The committee and TransMountain did not agree on the rate of return and capital structure, however. The oral portion of the Class 3 hearing – scheduled for March 1992 – will address these issues.

As expected, the Crude Oil Committee and its tolls subcommittee spent considerable time on regulatory issues related to the Interprovincial Pipeline system, addressing the Class 3 application, the Line 9 situation and apportionment. The focuses of the Class 3 application are rate of return and the debt/equity issue. The association took positions on IPL's rate of return and capital structure, deferred taxes, Line 9 tolling and its recapitalization, and the recovery of investigative costs for potential projects.

At both the TransMountain and Interprovincial hearings, the association recommended that pipelines adopt a continuous improvement program to increase operating efficiencies. This will reduce costs, to the benefit of both the pipelines and their customers.

Apportionment – the process by which pipelines pro rate capacity on certain products when pipeline demand is greater than capacity – has been a major issue on the IPL system since October 1990. This was due in part to hydrostatic testing and operations restrictions on the U.S. portion of the IPL system. The association participated in an industry group that developed an alternative to IPL's recommendations to eliminate high apportionment rates. Revised forecasting procedures went into effect in the first quarter of 1992.

The Crude Oil Movement Systems/ Electronic Data Interchange Project is now in the pilot stage and progressing well. Ten partners are exchanging crude oil data electronically.

The Oil Sands and Heavy Oil Committee developed a mission document that addressed such aspects of the oil sands industry as fiscal regime, lease tenure, and the environment. The document recognizes the interests of both government and industry as oil sands stakeholders. As a result of committee discussions with Alberta Energy on land tenure issues, the regulations in place are more favourable than those originally proposed.

Early in 1991, the Alberta Department of Energy began a detailed evaluation of all enhanced oil recovery schemes operating in Alberta. For the last several years the Crown, acting as a joint venture partner in industry schemes, has provided financial incentives to encourage miscible flood programs in aging oil fields. But an Alberta Energy analysis suggests that most of these projects are not meeting original forecasts of volumes of oil recovered or royalties received. As a result, Alberta Energy proposed significant cutbacks to Section 4.2 of the financial incentive program. Last year, the Enhanced Oil Recovery Committee successfully negotiated with Alberta Energy to moderate the effect of the proposed changes. ■

J.R. (Jim) Baroffio

President
Chevron Canada Resources

Natural Gas Policy

General Committee on Natural Gas Policy

- Natural Gas Policy Committee
- Foothills /ANG Committee
- Gas Deregulation Committee
- NOVA Committee
- TCPL Committee
- U.S. Transportation Committee
- Westcoast Committee
- GasEDI Committee

During 1991, the association invested much time and effort on U.S. gas matters, especially those related to California. By contrast, CPA participation in Canadian gas proceedings was less than in previous years.

Natural gas issues in California were extremely controversial. Governments, regulators, and industry on both sides of the border became involved. The association participated in the CPUC capacity brokering proceeding dealing with open access on the PG&E and SoCal Gas systems. CPA technical testimony advocated non-discriminatory capacity brokering consistent with FERC brokering guidelines. The association also submitted testimony on the contractual commitments and linkage between PG&E/PGT/A&S and Canadian producers. In its decision, the CPUC virtually ignored this testimony and effectively ordered the abrogation of contractual arrangements as of October 1992, when capacity brokering is likely to begin. To force the issue in the California controversy, the CPA asked the NEB to consider whether the CPUC actions violated the terms under which Alberta and Southern Gas Company received extensions to its export licenses in 1989. A decision on this hearing is pending.

J. M. (Jim) Stanford

President and CEO
Petro-Canada

The association also participated in FERC proceedings involving Great Lakes, Pacific Gas Transmission, and Northern Natural. In the Great Lakes proceeding, the FERC accepted CPA's recommendation by adopting the straight fixed variable rate design for firm service tolls. It also recognized CPA's position in setting interruptible rates.

In the Pacific Gas Transmission rates case, the association submitted testimony advocating straight fixed variable rate design for PGT, but at the end of the year the FERC had not issued its decision.

In a separate phase of the PGT proceeding, there was no agreement on the appropriateness of the proxy method used by PGT to allocate fixed costs associated with the transportation of Canadian gas supplies. For example, El Paso objected to the way FERC Order 256 allowed PGT to incorporate fixed costs associated with Canadian gas by simply using PGT's own demand/commodity split. A negotiated settlement among Canadian and U.S. parties deferred this issue until April 1992, citing new facts and circumstances. These included the potential sale of PGT to TransCanada and FERC's mega-NOPR. This proposed rulemaking calls for unbundling gas transportation and marketing activities, and proposes straight fixed variable rate design for all U.S. pipelines.

During 1991, Northern Natural's 1988 rates case settlement finally received certification from the Administrative Law Judge. However, the FERC has not yet issued its decision. In the settlement, CPA/APMC testimony helped reduce charges to Canadian shippers by 1¢ per thousand cubic feet by having Northern's market area made smaller. The CPA/APMC efforts also helped reduce the market area interruptible postage stamp rate to 21.5¢ per thousand cubic feet from the applied-for 37.6¢.

Although CPA participation in public hearings in Canada was less in 1991 than in previous years, there was still considerable activity in regulatory affairs. The CPA participated in several public hearings and spent much time and effort in pipeline/industry task forces focusing on regulatory matters.

The NEB hearing of TCPL's Blackhorse Pipeline application turned into a *cause celebre*. The Blackhorse Line was a $40 million project that would have added a second export point across the Niagara River. The justification for this project was a desire by some US-based shippers to by-pass the existing interconnect with Tennessee Gas Pipeline. However, the CPA, APMC, and the affected U.S. pipelines held that the existing border point could handle the increased volumes.

When the NEB denied TCPL's Blackhorse application, the interests involved filed an Application for Review. This application met with an unprecedented decision by the NEB to speed up the process. Following a Federal Court challenge, the NEB decided to conduct the review by calling another public hearing, scheduled for mid-1992.

The CPA submitted comments to the NEB that much of its Market-Based Procedure is unnecessary in the current environment. However, CPA did advocate retaining some controls over exports of natural gas, pending clarification of the policies of the California Public Utilities Commission.

The association was active in NOVA matters during 1991. Representatives participated on NOVA's Joint Industry Task Force and the Facilities Liaison Committee. The association supported reinstitution of NOVA's previous policy on third-party charges, to include CWNG or NUL's gas transportation charges for gas in NOVA's rates if certain operating and contractual conditions were met. This would eliminate additional costs to producers that had gas connected to the utility systems instead of to NOVA. NOVA rejected the association's position, wanting to maintain the status quo.

There was debate during 1991 on the length of NOVA's design cycle. The association continues to work with NOVA to develop a proposal that will reduce the length of the design cycle, to the satisfaction of both producers and NOVA.

During 1991, the Alberta Gas Producers group and NOVA were unable to come to a resolution on NOVA's 1992 rate of return and the appropriate deemed common equity ratio. As a result, the Alberta Gas Producers Group, CPA and IPAC all filed complaints with the Public Utilities Board calling for a hearing to resolve these disputed issues.

There was also considerable discussion during 1991 whether there should be a generic review covering all aspects of NOVA's operations. The association submitted comments to the ERCB, and requested a formal hearing.

The association took a lead role in developing mechanisms for the exchange of business information within the natural gas industry through electronic data interchange. The association struck a formal Gas EDI Committee, which in early 1991 issued a Canadian Gas EDI Feasibility Study. The association helped develop Canadian Gas EDI standards and analyzed the potential for common software, laying the foundation for EDI pilot projects. The association will help develop additional pilot projects, as companies become more efficient in the exchange of business information through EDI.

The association also participated in a British Columbia Utilities Commission hearing, which dealt with arrangements by which BC Gas might make direct sales to industrial customers and offer transportation service to third-party shippers. CPA advocated that BC Gas must accord shippers the same rights it receives itself.

The association participated in several other general B.C. gas issues. Of particular note, it commented on BCPC's Acquisition Border Pricing Calculation and on the Ministry of Petroleum and Energy Resources' Natural Gas Removal Policy. In its submission on the latter policy, the CPA said the gas removal policy announced in November 1990 was working satisfactorily and did not require change.

The association participated in the Manitoba PUB hearing on core market gas purchasing practices. The association submitted that end-users should determine their own appropriate contracting practices and security of supply requirements without regulatory interference. However, the CPA strongly recommended long-term supply arrangements for core market end-users.

The association was an active member of the TransCanada Tolls Task Force in 1991. All parties in that task force reached agreement on toll design and tariff issues, and on TCPL's 1992 Revenue Requirement. This allowed TCPL to seek an expedited, early-1992 hearing of its tolls application. Similarly, CPA was a member of the Westcoast Tolls Task Force, but that task force was unsuccessful in reaching agreement on Westcoast's 1992 tolls and revenue requirement. However, resolution of several tariff matters by the task force will reduce the scope of a 1992 NEB hearing to consider Westcoast tolls.

During 1992, the association will continue to be extremely active on U.S. matters. The association is preparing for proceedings within California, plus rates cases involving Great Lakes, PGT, Northern Natural, and Northwest Pipe. There will be specific implementation proceedings on FERC's mega-NOPR which will have major implications for Canada.

There will also be considerable activity domestically. Toll hearings for TCPL, Westcoast and TQ&M are likely, and the association may participate in hearings involving facility expansions for TransCanada and Westcoast. The association will play the unusual role of applicant in two hearings – an NEB review of A&S licenses (a result of the CPA response to CPUC's actions) and a review of NOVA's rate of return by Alberta's Public Utilities Board. ■

Safety, Health and Environment

General Committee on Safety, Health and Environment

- Alberta Petroleum Industry/ Government Environmental Committee
- Environmental Standing Committee
- Human Resources Committee
- Occupational and Environmental Health Committee
- PROSCARAC Inc.
- Safety Committee

The year 1991 saw diverse developments in the environmental, health and safety areas. Although opinion polls suggest that public concern about the economy overshadowed other concerns, high-profile environmental, health and safety issues still gathered headlines in every region of Canada. In addition, environment-related developments took place in the courts and the legislatures of Canada. The Northern Badger case created new legal precedents, while changes in environmental legislation took place at both the federal and provincial levels. The federal government began to carry out parts of its Green Plan, and there were important innovations in ways to manage environmental issues. In this latter area, the CPA was a lead player.

D. E. (Dave) Powell

President and CEO
Home Oil Company Limited

In response to the industry's financial situation, the committee began to develop more efficient and effective ways to get its work done. One initiative was to create a process that gauged the views of member companies and set priorities for the issues they face. These exercises clearly defined the areas of most concern to the association. This process has enabled the association to target its efforts clearly, and will result in improved cost effectiveness to members.

The association began to evaluate its committee structure to use available resources more effectively. This work will lead to a significant rationalization of the health, safety and environment committees.

The Upstream Petroleum Industry Task Force on Safety again was a priority for the Safety Committee. Much of the Committee's efforts related to the implementation of task force recommendations. Besides supporting the Implementation Standing Committee, the association helped sponsor a seminar on UPITFOS implementation for senior managers.

Another important accomplishment for the Safety Committee was the development of an industry standard for fire retardant clothing. The association's Board of Governors endorsed this standard. Through the Canadian General Standards Board, the association has begun promoting this standard nationally.

The Workers Compensation Board subcommittee worked with the Boards of the three western provinces and the Northwest Territories on assessment rates. This consultation reduced assessment rates, providing significant savings to the industry.

The Occupational and Environmental Health Committee was active in several areas in 1991. These included involvement in a cooperative process with Alberta Occupational Health & Safety to review occupational exposure limits for such substances as benzene for workers in Alberta industry. The committee also sponsored a study of vehicle-related back problems and is preparing guidelines for companies wanting to develop in-house drug and alcohol policies.

A task group began to develop resuscitation guidelines and specifications for supply of automated time-cycled resuscitators. The task force will complete this work in 1992.

The Environmental Standing Committee again had a busy year. In addition to involvement with such federal issues as the Green Plan, the Canadian Environmental Assessment Act and air issues, the association made two appearances before House of Commons Standing Committees. One of these had to do with environmental assessment legislation; the other, with the cost of environmental protection, particularly global climate change, on energy industries.

In addition to federal initiatives, the association addressed several provincial issues. These included involvement in the Clean Air Strategy for Alberta, which will have a major effect on how Alberta manages air quality in coming years. The CPA had a major influence on **The Clean Air Strategy for Alberta Report to the Ministers.** Many of the innovative approaches described in the report came from the CPA. These efforts helped lay the groundwork for industry participation in similar initiatives in British Columbia and Saskatchewan, to begin in 1992.

Besides its involvement in CASA, the Environmental Standing Committee reviewed and commented on emerging and changing legislation. These included the proposed Alberta Environmental Protection and Enhancement Act and Regulations and the Alberta Water Resources Act. Waste management and site decommissioning were areas of concentrated effort in 1991; efforts in these areas included the release of the CPA's **Production Waste Management Handbook.**

The Environmental Research Advisory Council continued to be a focus for research activity in 1991. Projects included an assessment of technology options for the treatment of waste sludge produced by gas plants; an evaluation of technology for treating conventional oil and gas waste sludge and solids contaminated with salt, metals and hydrocarbons; treatment technologies for remediating subsurface contamination around sour gas processing facilities; and a literature review on the burial of drilling waste solids. As in previous years, the CPA leveraged ERAC funds by working with governments in conducting this work. The group issued several research reports.

The air issues task force was busy on several fronts. These included field validation of a methane volatile organic compound inventory from the Alberta upstream oil and gas industry and a guide to energy conservation in the industry to reduce green house gas emissions for Alberta. The task force also commissioned an air emissions trade off comparison. This innovative study describes the increased emissions of global warming gases released from industrial facilities faced with additional incremental SO_2, NO_X or VOCs controls.

The community affairs subcommittee became involved in projects to improve the relationship between our industry and the public and community groups. One innovation was the production and presentation of the play *In Principle*, which presented the principles of public consultation in an interesting way. The committee also laid the groundwork for a meeting between native chiefs and members of the CPA Board of Governors.

The focus on oil spills as an issue continued to be high in 1991, and implementation of Task Force on Oil Spill Preparedness recommendations began in earnest. The Frontier Oil Spill Committee took part in 12 programs relating to TFOSP recommendations.

The Frontier Oil Spill Committee undertook a number of TFOSP initiatives, including cooperative joint efforts with other co-ops, government agencies and research organizations. The committee began work with Alaskan and Canadian groups on methods for recovery of oil in ice-infested waters. These efforts included a field test in Alaska. Another joint program looked at development of techniques to deal with viscous recovered oil. In addition, a consortium which includes the CPA is developing a spill trajectory model.

The Frontier Oil Spill Committee introduced the Incident Command System to the petroleum industry and to government departments through a series of introductory seminars. It is also working with the Prairie Regional Oil Spill Containment and Recovery Advisory Committee to develop spill expertise and equipment inventory database systems for quick, accurate access by member companies.

Reorganization of PROSCARAC (including its incorporation as an independent legal entity) will make the industry's oil spill containment and clean-up organization more effective. PROSCARAC again sought to put TFOSP recommendations into place, and added $220,000 to its stock of oil spill equipment. It also helped provide hands on training for some 2000 oil field personnel, and initiated six research and development projects. The organization also produced five publications, including two issues of an oil spill newsletter.

A newly developed monitoring plan will result in a yearly report on the progress of TFOSP implementation for both the onshore and offshore part of its mandate.

Safety, health and environment issues will continue to be a focus of public, government and industry concern in the coming year. Although the industry's economic outlook is poor, these issues will continue to demand time and effort from CPA members. And they will continue to become an increasingly bigger part of petroleum economics. In the year ahead, the association will find new ways to meet these challenges effectively. ■

Public Affairs

l Committee blic Affairs

During 1991 the Public Affairs Committee devised a five-year strategy to improve public perceptions of the industry. Its purpose: To contribute to the financial health and success of CPA's member companies by developing support for CPA positions within the public and key target audiences. The strategy focuses on three areas of industry activity. These are economics, the environment and core issues of particular concern to members.

The first application of the strategy came with the release of the PowerWest report on industry profitability. Specific events included a news conference in Calgary and a national news conference in Ottawa. The association followed these items up with meetings with the Alberta government's Energy Committee, with its Economic Affairs Caucus Committee and with key ministers in the federal government. These efforts helped increase understanding of the industry's economic situation.

I. R. (Ian) Smyth

President
Canadian Petroleum Association

Another major public affairs issue was the California Public Utilities Commission's attempt to abrogate the long-term contracts with Alberta natural gas producers. The issues are complex, and the approaches of the parties involved have often been confrontational. The CPA held media briefing sessions, issued several news releases on the California issue and responded to countless inquiries. Although the outcome is still unclear, public understanding has improved. And of particular importance, Canadian governments are supporting the association.

In matters of the environment, the association provided speakers at key public speaking engagements. The industry is a leader in environmental protection and preservation, but public perceptions of the industry are often negative. To counter this reality, the association will begin a community communications program in 1992.

Last year also saw a comprehensive reassessment of public affairs activity. Although an effective program in years past, the Journalism Awards have run their course. The association therefore ended that program after the 1991 awards presentation.

The CPA's public affairs group has been a leader in the use of computer applications for communications functions. In 1991, the association created textual databases so staff can answer specific inquiries more authoritatively. It also introduced electronic mail and enhanced existing graphics and desktop publishing functions. The association also developed closer ties with public affairs professionals from other industry associations to reduce duplication and take advantage of the efficiencies of joint initiatives.

Public affairs staff became actively involved in the work of CPA committees and divisions when issues required external communications. These included the Environmental Standing Committee, the Community Relations Committee, the Economics Committee and the Geophysical Committee. These activities receive recognition elsewhere in this annual report. The association's public affairs staff have traditionally played an important role in publicizing CPA conferences and other projects. Following the closure of CPA offices in Regina and Vancouver, direction for public affairs activities in Saskatchewan and British Columbia will come from the Calgary office.

CPA remains actively involved in the SEEDs educational program. And the association's Share the Earth Triathlon continues to be a focal point of Environment Week in Calgary. ■

British Columbia

British Columbia Division

Last year, British Columbia was the only area of high exploration activity for Canada's oil and gas industry. There were 239 wells drilled. Gas reserves probably rose for the sixth consecutive year, (reserve estimates will be released in July) even though gas production has been setting successive records.

Gas exports continued to rise and, for the first time, the number of firm energy removal certificates exceeded the number of interruptible energy certificates. The Vancouver Island Pipeline began delivering gas to new industrial and residential markets along the Sunshine Coast and on Vancouver Island. These deliveries will improve domestic gas sales in 1992.

The Ministry of Energy, Mines and Petroleum Resources reviewed the natural gas export policy to determine the effectiveness of the changes it had implemented in 1990. The division and member companies prepared submissions that recommended no further changes, noting that relatively little time had elapsed since implementation of the new policy. Later in the year the government announced that it had adopted this approach.

After a three-year freeze on natural gas rates, there was a rate hearing for BC Gas Inc., the local distribution company for most of the domestic B.C. market and the sole marketer to core residential markets. Through participation at that hearing, the CPA continued its support of deregulation and an unbundling of non-core markets.

Before the election, the division participated in a government-initiated review of the province's gas royalty regime. Although its stated aim was to encourage administrative simplicity, the government's proposed changes could have led to a redistribution of royalty obligations. The division convinced the Ministry of the value of regulatory continuity. One of the first acts of the new government was to announce that it would not pursue the review of the gas royalty regime.

Through its environment committees, the association is participating in several B.C. initiatives, including participation in the British Columbia environmental strategy exercise – B.C. 2001. An environmental committee is preparing environmental operating guidelines for B.C. The association and the province also worked together to deal with issues surrounding coalbed methane and underground gas storage.

R. F. (Richard) Guerrant

Vice President
Mobil Oil Canada

Fostering improved communication between industry and government continued to be a focus of division activity. With the change in government and closure of the Vancouver office, maintaining the high quality of government relations and ranking issues will be key challenges. To meet these challenges, the division's board has begun a thorough review of its function and priorities. ■

Frontiers

Frontier Division

- Arctic Management Committee
- East Coast Operators Management Committee
- Fisheries Advisory Committee
- Production Committee
- Safety Committee
- Oil Spill Committee

During 1991, exploration activity on the Canadian frontiers was slow. Exploratory wells included six north of 60°N and four off the east coast – two each offshore Newfoundland and Nova Scotia.

Land sales suggest that activity in the frontiers will remain low. There was no 1991 sale of Nova Scotia offshore rights during the year. The 1991call for bids by the Canada-Newfoundland Offshore Petroleum Board attracted $7.33 million in expenditure commitments on four parcels of land: three on the Grand Banks, one off the west coast of the province.

J. K. S. (John) Loh

Manager
Frontier Development
Gulf Canada

In the north, a Beaufort Sea parcel adjacent to the Amauligak oil discovery went to Chevron Canada and Amoco Canada for $3.2 million. In contrast, rights on three parcels of land in the Mackenzie Delta went to Shell Canada for $53.3 million.

However, development activity during 1991 was strong, with two projects proceeding off Canada's east coast. By year-end, LASMO Nova Scotia and Nova Scotia Resources had modified the Rowan Gorilla III jack-up rig for use as a production platform at Panuke/ Cohasset. They had also installed offshore production platforms on the two fields. LASMO plans to begin production in the second quarter of 1992.

In Newfoundland, work continues on the large and technologically challenging Hibernia project. The Bull Arm site preparation is well underway and the consortium awarded the contract for one of the five Topsides Super Module contracts during 1991. At year end, the project was on schedule to begin production (ultimately to reach 110 000 barrels per day) in late 1996.

However, in February 1992 that changed. Citing financial considerations, Gulf withdrew from the project. The initial response of the remaining members of the consortium was to reschedule the project as they looked for a new partner. This decision meant stopping construction on the production platform's concrete base (originally scheduled to begin in April). It also meant halving daily expenditures from the $3 million projected.

In the north, several significant events took place during 1991. Nellie Cournoyea became Government Leader in the Northwest Territories, and retained the Energy, Mines and Resources portfolio. A Gwich'in land claim settlement was achieved, and federal negotiators turned their focus to the Sahtu land claim.

Formed to review various procedural deficiencies, the Beaufort Sea Steering Committee completed its final report. The federal government disbanded the Canadian Oil and Gas Lands Administration, distributing its function among the NEB, DIAND and EMR. These and the continuing work of regulatory bodies in drafting legislation, regulations and guidelines, have made 1991 an active year for the Frontier Division Board and its committees and task forces.

The board addressed regulatory issues which included rights issuance, proposed royalty regulations and financial responsibility guidelines for exploration on the east coast offshore. Legislative issues included amendments to the Canadian Petroleum Resources Act and the National Energy Board Act.

The Arctic Management Committee focused its efforts on Northern Accord proposals, land claims settlement provisions and follow-up to the Beaufort Sea Steering Committee recommendations. The Eastcoast Operators' Management Committee continued to work with other industry associations and with government agencies to improve the **Qualifications, Safety Training and Certification (Drilling)** manual. The ECOMC also responded to Draft Regulations and Guidelines emanating from the Canada-Nova Scotia and Canada-Newfoundland Offshore Petroleum Boards and from the Canadian Coast Guard.

The Fisheries Advisory Committee has been addressing three main topics: a generic code of practice for interaction between the petroleum and fishing industries and – to deal with possible future compensation claims – preparation of a fishing gear catalogue and developing a method for assessing the tainting of fish by oil. Canadian Standards Association design standards for offshore facilities were important issues for the Production Committee. This Committee and the Safety Committee also prepared responses to successive drafts of the Offshore Installation Regulations.

The Task Force on Oil Spill Preparedness tabled its implementation plan in late 1990. Early in 1991, the Frontier Oil Spill Committee took charge of the implementation plan. A manager seconded to the committee from Gulf directed implementation of 17 initiatives in planning and prevention, research and development and improvements to equipment and training. Project costs for these initiatives were $600 000 – funding which the committee leveraged by co-sponsoring numerous projects with organizations such as Alaska Clean Seas, Canadian Coast Guard, U.S. Coast Guard and U. S. Marine Spill Response Corporation.

During 1991 the Frontier Division maintained direct communications with federal, provincial and territorial agencies and regulators by holding meetings in several distant locations – Halifax, St . John's, Ottawa, Yellowknife. In late 1991, the division closed its office in St. John's, leaving the Halifax office as the point of contact for the east coast region. However, the association and the Frontier Division remain committed to representing the interests of members in all regions and provinces where they do business and to promoting responsible frontier development. ■

Saskatchewan

Saskatchewan Division

• Safety and Public Affairs Committee

Last year saw a steady deterioration in the industry's economic climate. Companies are therefore re-assessing operating economics everywhere, including Saskatchewan.

Politically, a key event for the province was the election of a new government. Early in its mandate, the government has not given any indication that it will drastically change provincial energy policy. In fact, at the invitation of the new Minister of Energy, the division is preparing a submission on energy policy. The division welcomes this approach, believing that working together on these issues will produce the best results for all stakeholders in the province's oil and gas resources.

The industry is cutting costs everywhere it can, and reducing investment in response to difficult times. However, with reasonable fiscal regulations the industry can continue to play a key role in the Saskatchewan economy. The division intends to continue working with government and its agencies to ensure continued activity in the province. This will lead to benefits for the government and people of Saskatchewan in the form of significant royalty revenue and job spinoffs.

The industry worked closely with the previous government to develop policy for horizontal drilling, activity that led to regulations enacted in June 1991. The division spent considerable time and effort in providing input to these regulations, and believes the final result was a reasonable compromise for the stakeholders involved. A total of 146 horizontal wells were drilled in the province in 1991 compared to [illegible] in 1990. Saskatchewan continues to be a leader in the use of this technology.

On the negative side of the regulatory process, issues such as rural municipality road user fees and a new charge to fund the Oil and Gas Conservation Board have added more costs to industry operations. The division continues to seek ways to mitigate the effects of these miscellaneous charges.

The division commented in detail on TransGas Ltd. during the year. TransGas is an unregulated monopoly with the exclusive right to provide high pressure transmission services for natural gas throughout Saskatchewan. CPA and other associations (SEPAC, IPAC, SIGUA, CAC), representing the interests of users of TransGas services, established the TransGas Users' Advisory Council in 1991. The purpose of the council is to provide a forum for public input, to comment on the plans and activities of TransGas, and to advise the Company's Board of Directors. Although the division continues to press the Saskatchewan government to establish an effective regulatory mechanism, it also serves as an active founding member of the Council.

Other divisional issues included the SaskPower initiative on determining future electrical generating needs for the province, Manitoba's new royalty regime, GST and provincial tax harmonization, Occupational Health and Safety issues and Environmental concerns.

On the organization side, the decision to close the CPA's Regina office forced the board to reconsider the division's mandate. From the premise that senior producers within the industry should be represented as a body in Saskatchewan, the division intends to remain strong. The board will meet regularly in Regina as well as in Calgary.

The division will develop close ties to the new government, offering views on energy related matters in the province. As surely as the industry needs cooperation from the government to renew its financial health, the province needs a viable, profitable industry to achieve its policy objectives. This is the key message the division will deliver to the government in the year ahead. ■

A. P. (Andrew) Holder

Vice President
Home Oil Company Limited

Pipelines

Pipeline Division

- Alberta Subcommittee
- Lands and Rights-of-Way Committee
- Pipeline Environmental Committee
- Rate Regulation and Accounting Committee
- Technical Committee

The pipeline sector of the petroleum industry continued to grow to meet new market needs. In particular, gas transmission grew with increasing exports to the United States. The Pipeline Division maintained its leadership in developing pipeline industry positions on key environmental, safety and technical issues.

The division began a review of its committee structure and operating procedures to ensure that it meets members needs efficiently. This review will be complete and changes in place by mid-1992.

The division continued to express concern to regulatory agencies about duplication and overlap of responsibilities.

B. J. (Bernie) Bradley

Senior Vice President
AEC Pipelines

The division met with the Transportation Safety Board of Canada to explain how safety considerations influence the design and operation of pipelines and to express concern about duplication between the NEB and the TSB. The division advocates a single window approach as the most effective way to meet regulatory needs.

The division, which continued to promote safety within the pipeline industry, presented the Pipeline Safety and Performance Awards at the Fifth CPA Pipeline Conference.

The 1990 Oil Pipeline Performance Review reported 36 failures, down from the 10-year average of 42. This improvement came despite an increase in the kilometres of pipelines in service and the total delivered volumes. (There was, however, a slight decrease in total traffic volumes.) Repair, damage and cleanup costs for this period were higher, primarily because of one large incident. There were no injuries.

The division addressed leak detection in several areas. First, the division received the results of a commissioned study on the effectiveness of leak detection methods used by the industry. Second, a task force struck at the request of the ERCB completed its review of CPA's Recommended Practice for Leak Detection systems and reported to the ERCB. Finally, a Recommended Practice for the qualification of technicians on non-destructive examination of welds was completed.

In 1991, the division struck task forces to develop high vapour pressure emergency response plans, training guidelines for emergency response and for control operators. The division also continued its participation on a government task force on Tank Measurement. These task forces will probably issue their reports in 1992.

The division established a task force to develop a background document on the economic implications of negative salvage. When completed in 1992, this document will provide common ground for discussions among the pipeline industry, producers and regulators on whether, when and how to collect funds for negative salvage.

Environmental issues continued to dominate many of the division's activities. Through its Environment Committee, the division was a major contributor to CPA's submission on Bill C-13, the federal government's Act to develop an environmental assessment process. The division also contributed to other CPA submissions to provincial and federal government initiatives. The division's involvement will continue in 1992 as regulatory initiatives evolve. The division continued to be an active participant in the Association's oil spill prevention organization, PROSCARAC Inc, through representation on the PROSCARAC Board.

The division continued as a member of an industry/government committee that deals with pipeline related environmental issues. Through this committee, the division supported the development of soil handling procedures related to pipeline construction and the planning of a reclamation workshop for 1992.

The division continued to exchange information with the NEB on current procedures, environmental screening requirements and improvements to the regulatory process. In cooperation with government, the division initiated plans to hold a national pipeline water crossing workshop. Held in early 1992, this workshop addressed government concerns related to fisheries and pipeline construction.

The division distributed 10 000 copies of its standard facilities crossing agreement document to pipeline companies and utilities; it also encouraged the use of this guide to simplify day-to-day industry land activities. A French translation of this document will be available early 1992.

The division also completed the update of a pipeline right-of-way field practices booklet to assist field personnel on right-of-way issues. Environmental and public concerns remain priority issues which will continue to affect all aspects of the pipeline industry. In the coming year, the division will continue its leadership on technical, safety and environmental issues. In doing so, the division will work with regulatory agencies to ensure consistent practical approaches to solving issues of concern to the industry. In this way, the division is working toward a safer, more environmentally sound operating framework for the industry. ■

IPELINE SAFETY AWARDS

Best performance, personal injuries

Alberta Natural Gas Company Ltd. (small)
Petro-Canada (medium)
Trans Mountain Pipe Line Company Ltd. (large)

Best performance, vehicle accidents

Norcen Energy Resources Limited (small)
Petro-Canada (medium)
Amoco Canada Petroleum Ltd. (large)

Best performance, operational incidents

Suncor Inc. (small)
Peace Pipe Line Ltd. (medium)
AEC Pipelines (large)

No incidents in all three categories

Westcoast Petroleum

1992/93 Board of Governors

D.D. (Doug) Baldwin
Senior Vice President, Resources Division
Imperial Oil Limited

J.R. (Jim) Baroffio
President
Chevron Canada Resources

R.P. (Ron) Billings
President and General Manager
Mobil Oil Canada

B.J. (Bernie) Bradley
Senior Vice President
AEC Pipelines

D.A. (David) Claydon
Chairman and CEO
BP Canada Inc.

B.D. (Barry) Cochrane
President and CEO
Norcen Energy Resources Limited

L.B. (Lorne) Gordon
President and CEO
Pembina Corporation

W.J. (Warren) Hairford
President and General Manager
Conoco Canada Limited

C.K. (Kent) Jespersen
President
Foothills Pipe Lines Ltd.

I.J. (Irv) Koop
President and CEO
Westcoast Petroleum Ltd.

R. W. (Bob) Laidlaw
President
Gibson Petroleum Company Ltd.

B.F. (Brian) MacNeill
President and CEO
Interprovincial Pipe Line Inc.

G.J. (Gerry) Maier
Chairman, President and CEO
TransCanada PipeLines

R.A. (Ron) McIntosh
Vice President
Amerada Hess Canada Ltd.

J.A. (Angus) McKee
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President and CEO
Alberta & Southern Gas Co. Ltd.

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Syncrude Canada Ltd.

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PanCanadian Petroleum Limited

L.E. (Len) Pasychny
President and CEO
Home Oil Company Limited

D.E. (Dave) Powell
President and CEO
Home Oil Company Limited

A.R. (Art) Price
President and CEO
Husky Oil Operations Ltd.

T.H. (Ted) Renner
President and CEO
Saskatchewan Oil and Gas Corporation

J.W. (Jack) Schanck
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C.E. (Chuck) Shultz
President and CEO
Gulf Canada Resources Limited

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Alberta Gas Transmission Division
NOVA Corporation of Alberta

T. Don Stacy
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Amoco Canada Petroleum Company Ltd.

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President and CEO
Petro-Canada

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Executive Vice President
Suncor Inc.

R.B. (Dick) Stokes
President and CEO
Trans Mountain Pipe Line Company Ltd.

D.G. (Doug) Stoneman
Executive Vice President
Shell Canada Limited

G.J. (Gavin) Couper
Senior Vice President
TransCanada PipeLines;
Chairman, Pipeline Division

G.J. (Gerry) Macey
Vice President
BP Canada Inc.;
Chairman, B.C. Division

A.P. (Andrew) Holder
Vice President
Home Oil Company Limited
Chairman, Saskatchewan Division

S.A. (Stewart) McCrae
Manager External Affairs
Chevron Canada Resources;
Chairman, Frontier Division

CPA Awards

HONOURARY LIFE MEMBERSHIPS

G.D. (George) Grant, retired General Manager, Business Development, Chevron Canada Resources

B.B. (Bartlett) Rombough, retired CEO, PanCanadian Petroleum Limited

MERIT AWARDS

D.B. (Bud) Agnew
Amoco Canada Petroleum Company Ltd.

M.E. (Liz) Atkey
Nova Corporation of Alberta

B.T. (Bruce) Corbet
Husky Oil Operations Ltd.

A.R. (Bob) Fraser
Amoco Canada Petroleum Company Ltd.

J.B. (Brent) Fraser
Shell Canada Limited

R.H. (Bob) Harper
Mobil Oil Canada

D.(Dan) Hiscott
Amoco Canada Petroleum Company Ltd.

A.M. (Andy) Ilnycky
Mobil Oil Canada

K. (Ken) Jackson
Amoco Canada Petroleum Company Ltd.

T. (Tim) Kemp
ETV Exploration Services Ltd.

R.H. (Rick) Kline
Unocal Canada Limited

F. (Fred) Kuipers
Pembina Corporation

R.H. (Bob) Mackie
PanCanadian Petroleum Limited

D. (Dave) McLintock
Shell Canada Limited

R. (Ron) Miller
Amoco Canada Petroleum Company Ltd.

B.W. (Bruce) Mitchell
Shell Canada Limited

R.J. (Randy) Ottenbreit
Imperial Oil Limited

B.W. Plesuk
Gulf Canada Resources Limited

W.A. (Wayne) Scott
Chevron Canada Resources

W.W. (Wally) Scott
Alberta Energy Company Ltd.

J.A. Sharples
Chevron Canada Resources

C.B. (Cal) Sikstrom
Imperial Oil Limited

N. (Nick) Vanderkooy
Canadian Marine Drilling

A. (Archie) Wells
Suncor Inc.

CPA Operations

Since the industry's early days in western Canada, Canadian Petroleum Association members have been leaders in the oil and gas sector. Association roots go back to 1927, when a group of small companies formed the Alberta Oil Operators' Association.

As the industry grew and its activities broadened, so did those of the association. It grew from a local to a regional body and, in 1952, became national under its current name.

The active membership of CPA includes Canadian exploration, production and pipeline companies. These companies range in size from large to medium to small, and from Canadian to international. Among them, they produce 75 per cent of Canada's liquid hydrocarbons and 65 per cent of the nation's gas. They also account for 60 per cent of upstream exploration and capital expenditures together with virtually all investment in pipelines.

Made up of high-ranking officers of member companies, a Board of Governors directs CPA affairs and develops its policies. Divisions address policies unique to British Columbia, Saskatchewan, the frontiers and pipelines, each of which has its own board of directors.

Some fifty standing committees, subcommittees and task forces form the backbone of the association. These committees deliberate on hundreds of issues in any given year. Through this organizational structure, member companies address matters that affect the entire industry. Committee members have a wide range of professional skills and experience. They include accountants, economists, drillers, engineers, geologists, environmentalists, geophysicists, landmen, lawyers and many other disciplines.

Through the Board of Governors, the various committees and other authoritative spokesmen communicate CPA policy recommendations to governments, regulators, other trade associations and the public. The association thus provides a focal point for its member companies to develop consensus on industry issues. It also serves as a conduit, providing an industry perspective on petroleum-related issues to governments and the public.

The association also helps meet the demand for information about the Canadian petroleum industry. That demand comes from private citizens, media, companies, government agencies and others from around the world. An information backbone is the **Statistical Handbook**, now in its 37th edition. It is the major source for petroleum statistics of any kind in Canada. It is also the basis for the CPA's online electronic database, **CPASTATS**. In 1991, the association published the second issue of **CPA Petrographs**, a booklet that provides a graphic analysis of key oil and gas industry statistics.

Every year the CPA Reserves Committee releases its assessment of Canadian oil and gas reserves. This report offers estimates of crude oil, natural gas, natural gas liquids and sulphur reserves by province and region. The association's statistics on industry expenditures, wells drilled and production are also authoritative.

To supplement its information analysis and policy activities, the association has developed regional and national economic models. These econometric models assess the impact of economic and fiscal changes together with activity patterns.

Through the association, the industry achieves significant cost efficiency and cost savings. For example, the Natural Gas Policy Committee is a regular intervenor at regulatory hearings, especially toll hearings. The complexity of these issues and the need for continuity make it difficult for most companies to act individually on these issues. CPA involvement thus meets an important need.

The association communicates its views and policies to the public and governments through publications, news releases, news conferences and comment together with technical data for the media. Hundreds of television, radio and print interviews reflect CPA views each year. The association also sponsors several industry conferences and provides speakers to address conferences in Canada, the United States and other countries.

The CPA Review continues to be the association's principal publication. The Frontier Division publishes the **Eastern Offshore News** to cover industry activities in the Atlantic, and the **Arctic Petroleum Review** to deal with issues and developments affecting the far north. **The OSCAR Report** deals with oilspill prevention and recovery in western Canada; **EDI Matters** discusses electronic data interchange within Canada's petroleum industry. Restricted to member companies, the **CPA Monitor** outlines current industry issues, noting in particular the association's involvement and position.

The association sponsors or co-sponsors a variety of technical conferences each year. In 1991, these included conferences on electronic data interchange, pipelines and natural gas marketing; a management workshop on incident command systems; a Canada/Alaska oil spill workshop; and the petroleum industry's 40th Annual Safety Seminar.

Through its committees, staff and three offices in Canada, the CPA is an important industry voice in the social fabric of Canada. By focusing on effective communication, the association contributes to a sound policy environment for the industry. ■

Membership

RODUCERS

Amerada Hess Canada Ltd.
Amoco Canada Petroleum Company Ltd.
Anadarko Petroleum of Canada Ltd.
BP Canada Inc.
Canadian Occidental Petroleum Ltd.
Chevron Canada Resources
Conoco Canada Limited
Gibson Petroleum Company Ltd.
Gulf Canada Resources Limited
Home Oil Company Limited
Husky Oil Operations Ltd.
Imperial Oil Limited – Resources Division
LASMO Nova Scotia Limited
Mobil Oil Canada
Murphy Oil Company Ltd.
Norcen Energy Resources Limited
PanCanadian Petroleum Limited
Pembina Corporation
Petro-Canada
Placid Oil Company
Quintana Exploration Canada Ltd.
Saskatchewan Oil and Gas Corporation
Shell Canada Limited
Suncor Inc.
Syncrude Canada Ltd.
Total Petroleum Canada Ltd.
Unocal Canada Limited
Westcoast Petroleum Ltd.

PIPELINES

AEC Pipelines
Alberta Natural Gas Company Ltd.
Alberta & Southern Gas Co. Ltd.
Canadian Western Natural Gas Company Limited
Foothills Pipe Lines Ltd.
Imperial Oil Limited – Products Division
Interprovincial Pipe Line Inc.
NOVA Corporation of Alberta
Polar Delta Project
Producers Pipelines Inc.
Rainbow Pipe Line Company Ltd.
South Saskatchewan Pipe Line Company
Sun-Canadian Pipe Line Company Limited
TransCanada PipeLines Limited
Trans Mountain Pipe Line Company Ltd.
Trans-Northern Pipelines Inc.
Westcoast Energy Inc.

MARKETERS

CanWest Gas Supply Inc.
Pan Alberta Gas Ltd.
Progas Limited
Western Gas Marketing Limited

ASSOCIATE MEMBERS

All-Can Engineering & Surveys (1976) Ltd.
Altamont Gas Transmission Company
Arthur Andersen & Company
Ballem, McDill & MacInnes
Bank of Montreal
Bank of Nova Scotia
Canadian Imperial Bank of Commerce
Challenger Surveys & Services Ltd.
Chem-Security (Alberta) Ltd.
The City of Calgary
Complete Land Services Ltd.
Coopers & Lybrand
Deloitte & Touche
Eastman Christensen Canada Limited
Ernst & Young
Felesky Flynn
G.E. Canada Inc.
Great Lakes Gas Transmission Limited Partnership
Hibernia Management and Development Company Ltd.
H.G.S. Incorporated
Marsh & McLennan Ltd.
McCarthy Tetrault
McDaniel & Associates Consultants Ltd.
Milner Fenerty
Motorola Canada Limited
Nickle Map Service Ltd.
Pallister Resource Management Ltd.
Peat Marwick Thorne
Petro-Info Ltd.
Price Waterhouse
Prudential Steel Ltd.
Reed Stenhouse Limited
The Royal Bank of Canada
Stephen Johnson
Stewart, Weir & Co.
Telecom Canada
Telesat Canada
Thorsteinsson & Company
The Toronto-Dominion Bank
TransAlta Utilities Corporation
Unitel Communications Inc.
The University of Calgary - Surveys & Mapping
Unryn & Associates Ltd.
Usher Canada Limited
The Wyatt Company